

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An automotive window regulator system comprising:
a guide rod defining a central axis extending in a vertical direction, said guide rod adapted for rotating about said central axis;
a runner including a body portion and a pair of trunnions, said runner drivingly engaged with said guide rod, said runner moveable and moving in said vertical direction along said guide rod between a first position and a second position in response to rotation of said guide rod; and
a window carrier including a primary channel extending in said vertical direction and a secondary channel extending in a lateral direction substantially orthogonal to said vertical direction, said body portion of said runner is disposed in said primary channel ~~preventing which prevents~~ rotation of said runner about said central axis and said trunnions are disposed in said secondary channel thereby coupling said runner and said carrier together for movement of said carrier with said runner in said vertical direction, said trunnions defining a lateral axis substantially orthogonal to said central axis;
wherein said carrier rotates about said lateral axis and said carrier translates in a horizontal direction substantially orthogonal to said vertical and lateral directions such that said trunnions move relative to said carrier in said horizontal direction within said secondary channel in response to moving said runner between said first and second positions, whereby a rotational and translational movement of said carrier permits nonparallel movement of said carrier with respect to said central axis as said runner moves between said first and second positions.
2. (Currently amended) A system according to claim 1, including an arcuate window mounted to said carrier, said window having a radius of curvature, said system further including first and second glass run channels, each of said first and second glass run channels having substantially the same radius of curvature ~~[[of]]~~ as said window, into which first and second

edges of said window are received, said glass run channels defining ~~[[the]]~~ a path of travel of said window as said runner moves between said first and second positions.

3. (Currently amended) A system according to claim 1, including an arcuate window mounted to said carrier, said window having a radius of curvature, said system further including a guide engaging said carrier, said guide having substantially the same radius of curvature ~~[[of]]~~ as said window such that said carrier guides said window along a path coincident with the radius of curvature of said window as said runner moves between said first and second positions.

4-5. (Cancelled)

6. (Withdrawn) A system according to claim 1, wherein the runner and carrier are connected by an arm pivotally connected to each of the runner and carrier.

7. (Previously presented) A system according to claim 1, wherein said guide rod is a straight threaded screw and said runner includes a threaded bore threadingly received onto said screw.

8. (Previously presented) A system according to claim 7, further including a motor which rotationally drives said screw about said central axis to move said runner between said first and second positions.

9-17. (Cancelled)

18. (Withdrawn) A window regulator according to claim 17, wherein the runner has a slot therein defining the second axis, and a shank pivotally mounts the window carrier to the runner via the slot.

19. (Previously presented) A system according to claim 1, wherein said trunnions include an elliptical surface, said elliptical surface bearing on opposing surfaces of said secondary channel.

20. (Previously presented) A system according to claim 3, wherein said carrier includes a slider channel extending in said vertical direction, said slider channel slidably engaging said guide.

21. (New) An automotive window regulator system comprising:

a guide rod defining a central axis extending in a vertical direction, said guide rod adapted for rotating about said central axis;

a runner including a body portion and a pair of trunnions, said runner drivingly engaged with said guide rod, said runner moveable in said vertical direction along said guide rod between a first position and a second position in response to rotation of said guide rod;

a window carrier including a primary channel extending in said vertical direction and a secondary channel extending in a lateral direction substantially orthogonal to said vertical direction, said body portion of said runner is disposed in said primary channel which prevents rotation of said runner about said central axis and said trunnions are disposed in said secondary channel thereby coupling said runner and said carrier together for movement of said carrier with said runner in said vertical direction, said trunnions defining a lateral axis substantially orthogonal to said central axis;

wherein said carrier rotates relative about said lateral axis and said carrier translates in a horizontal direction substantially orthogonal to said vertical and lateral directions such that said trunnions move relative to said carrier in said horizontal direction within said secondary channel in response to moving said runner between said first and second positions, whereby a rotational and translational movement of said carrier permits nonparallel movement of said carrier with respect to said central axis as said runner moves between said first and second positions;

an arcuate window mounted to said carrier, said window having a radius of curvature;
and

a guide engaging said carrier, said guide having substantially the same radius of curvature as said window such that said carrier guides said window along a path coincident with the radius of curvature of said window as said runner moves between said first and second positions.